

WHAT IS CLAIMED IS:

1. A method for receiving by a mobile station a broadcast service from a base station that transmits in the same time period data on a packet data channel and a packet data control channel corresponding to the packet data channel, comprising the steps of:
 - receiving a broadcast service parameter message including parameters for a broadcast service;
 - transmitting desired broadcast service parameters along with a broadcast service request message based on the parameters;
 - receiving a packet data channel assignment message for the desired broadcast service in response to the packet data channel assignment request message; and
 - decoding reception data on a packet data control channel corresponding to the assigned packet data channel to acquire control information, receiving packet data on a packet data channel for the broadcast service according to the control information, and processing the received packet data as broadcast service data.
- 20 2. The method of claim 1, wherein the packet data channel assignment message includes a broadcast user identifier (ID) used as packet data address information for a desired broadcast service.
3. The method of claim 2, wherein the broadcast user ID is
25 commonly assigned to a plurality of mobile stations.
4. The method of claim 1, wherein the packet data channel request message includes a BCS ID
5. The method of claim 1, further comprising the step of
30 performing an error check on the packet data, and transmitting an acknowledge

signal (ACK) if it is determined that there is no error as a result of the error check.

6. The method of claim 1, further comprising the step of performing an error check on the packet data, and buffering the packet data after
5 transmitting a non-acknowledge (NAK) signal if it is determined that there is an error as a result of the error check.

7. The method of claim 1, further comprising the step of discarding reception data on the packet data channel upon failure to decode reception data
10 on the packet data control channel.

8. The method of claim 1, wherein the control information includes retransmission information indicating if the reception data on the packet data channel is retransmitted data.
15

9. The method of claim 8, further comprising the steps of:
determining if the reception data on the packet data channel is retransmitted data, based on the retransmission information included in the control information; and
20 if the reception data on the packet data channel is not retransmitted data, decoding the reception data on the packet data channel in order to extract the packet data.

10. The method of claim 9, further comprising the steps of:
25 if it is determined that the reception data on the packet data channel is retransmitted data, determining if corresponding packet data has been previously successfully received; and
if corresponding packet data has been previously successfully received, discarding the reception data on the packet data channel.

30

11. The method of claim 10, further comprising the steps of:
if it is determined that corresponding packet data has not been previously
successfully received, acquiring the packet data by decoding the reception data
on the packet data channel; and
5 combining the acquired packet data with the previously received packet
data.

12. A method for providing a broadcast service to mobile stations by
a base station that transmits in the same time period data over a packet data
10 channel and a packet data control channel corresponding to the packet data
channel, comprising the steps of:

transmitting a packet data channel assignment message for a broadcast
service, if a packet data channel assignment request message including particular
broadcast service information is received after transmitting a broadcast service
15 parameter message including parameters for a broadcast service; and

transmitting packet data for the requested broadcast service over the
assigned packet data channel, and transmitting control information over a packet
data control channel corresponding to the packet data channel.

20 13. The method of claim 12, wherein the packet data channel
assignment message includes a broadcast user identifier (ID) used as packet data
address information for a desired broadcast service.

14. The method of claim 13, wherein the broadcast user ID is
25 commonly assigned to a plurality of mobile stations.

15. The method of claim 12, further comprising the step of
retransmitting the packet data over the packet data channel if a non-acknowledge
signal (NAK) is received from at least one mobile station in response to the
30 transmitted packet data.

16. The method of claim 15, wherein the retransmission step comprises the step of transmitting control information including retransmission information indicating that the packet data is retransmitted data, over the packet
5 data control channel corresponding to the packet data channel.

17. The method of claim 12, further comprising the step of transmitting a next packet data after discarding the packet data if an acknowledge signal (ACK) is received from all or some of the mobile stations receiving the
10 requested broadcast service in response to the transmitted packet data.

18. The method of claim 12, further comprising the step of retransmitting the packet data over the packet data channel, if a non-acknowledge signal (NAK) is received from at least a predetermined number of mobile
15 stations from among all mobile stations receiving the requested broadcast service, in response to the transmitted packet data.

19. The method of claim 18, wherein the retransmission step comprises the step of transmitting control information including retransmission
20 information indicating that the packet data is retransmitted data, over the packet data control channel corresponding to the packet data channel.